

CLAIMS

1. A soy-containing cheese product comprising a deflavored soy protein material, wherein the deflavored soy protein material is prepared by a method comprising:

(a) obtaining a soy protein composition containing soluble soy proteins, flavoring compounds, and insoluble materials;

(b) solubilizing the soy proteins by adjusting the soy protein composition of (a) to a pH in the range of about 9 to about 12 and releasing the flavoring compounds;

(c) passing the pH-adjusted soy protein composition of (b) adjacent an ultrafiltration membrane having a molecular weight cutoff up to about 50,000 Daltons, while maintaining the pH in the range of about 9 to about 12, under suitable ultrafiltration conditions wherein the flavor compounds pass through the membrane, thereby deflavoring the soy protein composition and retaining substantially all of the solubilized soy proteins; and

(d) recovering the solubilized soy proteins retained by the ultrafiltration membrane, wherein the recovered solubilized soy proteins is the deflavored soy protein material.

2. The soy-containing cheese product of claim 1, wherein the soy-containing cheese product is a process or natural cheese containing about 2.5 to about 6.5 g soy protein per single serving size of about 30 g.

3. The soy-containing cheese product of claim 1, wherein the aqueous composition of (a) has a concentration of soy proteins in the range of about 1 to about 20 percent.

4. The soy-containing cheese product of claim 2, wherein the aqueous composition of (a) has a concentration of soy proteins in the range of about 1 to about 20 percent.

5. The soy-containing cheese product of claim 1, wherein the ultrafiltration membrane has a cutoff in the range of about 1,000 to about 50,000 Daltons.

6. The soy-containing cheese product of claim 5, wherein the ultrafiltration membrane has a cutoff in the range of about 10,000 to about 30,000 Daltons.

7. The soy-containing cheese product of claim 2, wherein the ultrafiltration membrane has a cutoff in the range of about 1,000 to about 50,000 Daltons.

8. The soy-containing cheese product of claim 7, wherein the ultrafiltration membrane has a cutoff in the range of about 10,000 to about 30,000 Daltons.

9. The soy-containing cheese product of claim 5, wherein the ultrafiltration is carried out at a temperature in the range of about 10 to about 60°C and a suitable pressure.

10. The soy-containing cheese product of claim 9, wherein the ultrafiltration membrane is a polymer, ceramic, or inorganic membrane.

11. A method of preparing a soy-containing cheese product, said method comprising mixing a deflavored soy protein material and a cheese base composition to form the soy-containing cheese product;

wherein the deflavored soy protein material is prepared by a method comprising:

(a) obtaining a soy protein composition containing soluble soy proteins, flavoring compounds, and insoluble materials;

(b) solubilizing the soy proteins by adjusting the soy protein composition of (a) to a pH in the range of about 9 to about 12 and releasing the flavoring compounds;

(c) passing the pH-adjusted soy protein composition of (b) adjacent an ultrafiltration membrane having a molecular weight cutoff up to about 50,000 Daltons, while maintaining the pH in the range of about 9 to about 12, under suitable ultrafiltration conditions wherein the flavor compounds pass through the membrane, thereby deflavoring the soy protein composition and retaining substantially all of the solubilized soy proteins; and

(d) recovering the solubilized soy proteins retained by the ultrafiltration membrane, wherein the recovered solubilized soy proteins is the deflavored soy protein material.

12. The method of claim 11, wherein the soy-containing cheese product is a process or natural cheese containing about 2.5 to about 6.5 g soy protein per single serving size of about 30 g.

13. The method of claim 11, wherein the ultrafiltration membrane has a cutoff in the range of about 1,000 to about 50,000 Daltons.

14. The method of claim 12, wherein the ultrafiltration membrane has a cutoff in the range of about 1,000 to about 50,000 Daltons.

15. The method of claim 13, wherein the ultrafiltration is carried out at a temperature in the range of about 10 to about 60°C and a suitable pressure and wherein the ultrafiltration membrane is a polymer, ceramic, or inorganic membrane.

16. The method of claim 14, wherein the ultrafiltration is carried out at a temperature in the range of about 10 to about 60°C and a suitable pressure and wherein the ultrafiltration membrane is a polymer, ceramic, or inorganic membrane.